

## Key Facts About Lyme

Lyme disease has been reported in all 50 states and on six continents. The Centers for Disease Control (CDC) estimates 476,000 cases per year, but some experts believe the true incidence may be much higher.

The poppy seed-sized immature tick, or nymph, is so small that you may not see it or feel its bite. Tick infection rates vary from place to place. In some areas, 60% or more may be infected.



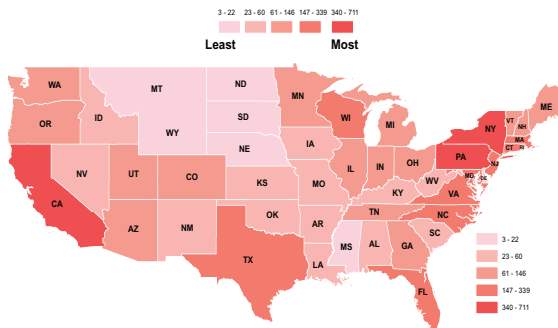
Tick climbing on finger

Ticks feed on deer, mice, rabbits, squirrels, ground-feeding birds, woodrats, lizards and many other kinds of wildlife. Dogs, cats, and horses can develop Lyme disease. Furthermore, pets can carry ticks into your home.

Ticks can transmit multiple diseases at the same time. Such co-infections can complicate diagnosis and treatment.

## Cases in the United States

Local health departments only report cases meeting the strict CDC surveillance case definition. So, official numbers represent just a fraction of true cases.



## What is Lyme disease?

Lyme disease is caused by bacteria called *Borrelia burgdorferi*. It can infect any organ of the human body, including the brain, heart, eyes, joints and nervous system.

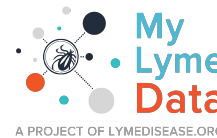
## About LymeDisease.org

LymeDisease.org is the most trusted internet source for Lyme patients in the US. We are committed to shaping health policy through advocacy, legal and ethical analysis, education, and medical research. LymeDisease.org is a 501(c)(3) nonprofit corporation, so donations are tax-deductible. Donate online or mail your check to PO Box 716, San Ramon, CA 94583.

We educate and advocate via our website, [lymedisease.org](http://lymedisease.org), as well as on Facebook, Twitter and Instagram. Members get free access to our digital journal, The Lyme Times.

## About MyLymeData

MyLymeData is the largest national patient registry and research platform for Lyme disease, with over 15,000 people enrolled. Patients pool their data to help scientists better understand how Lyme affects different people differently. Add your Lyme data to MyLymeData to help find a cure.



**HELP FIND A CURE FOR LYME DISEASE**

MyLymeData is a national study of chronic Lyme disease that allows patients to privately pool diagnosis and treatment experiences providing data that can drive research.

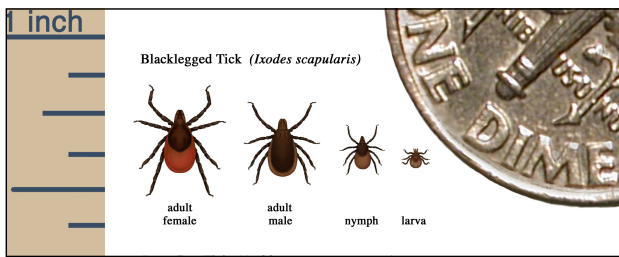
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-  <https://www.lymedisease.org>
-  <https://groups.lymedisease.org/g/Lyme>

## Which one is NOT a Lyme rash? Look inside for answer.



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POWERED BY PATIENTS



**Nymphs cause most cases (Enlarged to show detail)**

## How do people catch it?

Most people catch Lyme disease from the bite of an infected nymphal tick. Nymphs are so tiny, many people don't notice or remove them. The bite is painless so people may not even realize they have been bitten.

The longer ticks are attached, the greater the risk they will infect you. That's why it's essential to routinely check yourself and your children, and to promptly remove any ticks you find. Not all ticks are infected. Infection rates vary locally depending on wildlife, microclimate, and other factors. **Identify your tick at:** <https://www.lymedisease.org/types-of-ticks/>

## Do I have Lyme disease?

Early Lyme often resembles a flu-like illness with headache, fever, sweats, nausea, muscle aches, joint pain, and extreme fatigue. Some people develop a rash or facial paralysis. Symptoms may disappear without treatment, only to reappear later.

Lyme disease is called the "Great Imitator" because it can mimic other diseases. Many people with Lyme disease are misdiagnosed—



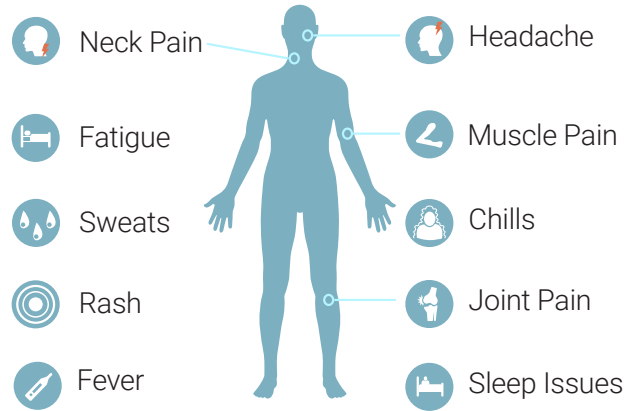
**Facial palsy caused by Lyme**

sometimes for years—with such conditions as fibromyalgia or chronic fatigue. If your brain is infected, doctors might think you have MS, ALS, ADHD, Parkinson's, or even mental illness. Symptoms may come and go and usually worsen over time if not treated.

## Bull's-eye rash: only 9% of cases

A pinkish rash called erythema migrans (EM) may develop around the tick bite area. Sometimes it looks like a "bull's-eye," although more often it's a solid round shape. Many people get no rash at all, and some develop several satellite rashes. A small red welt might be an allergic reaction to tick saliva, not an EM. Take a photo of any rash and have it checked as soon as possible by a doctor who is knowledgeable about Lyme disease.

**Check your symptoms at:** <https://www.lymedisease.org/lyme-disease-symptom-checklist/>



## What is the treatment for Lyme?

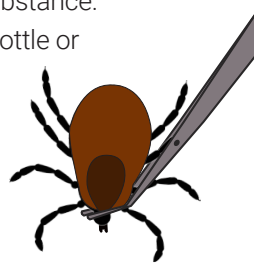
LymeDisease.org endorses the evidence-based treatment guidelines of the International Lyme and Associated Diseases Society (ILADS.org). They provide for personalized care based on how long you've been infected, how seriously ill you are, whether you have co-infections, and how well you respond to treatment.

Early treatment is often successful. Lyme is harder to treat if diagnosis is delayed. Due to the variety of Lyme symptoms and co-infections, patient response to treatment varies considerably. Extended treatment may be needed. If you have been treated and still have symptoms, we recommend that you see an ILADS-trained physician.

LymeDisease.org supports the patient's right to make informed choices. Only you and your doctor can decide on the treatment approach to best address your medical needs. **To find a Lyme-literate physician go to:** <https://www.lymedisease.org/find-lyme-literate-doctors/>

## How should I remove a tick?

- Use tweezers or a special tick-removing tool.
- Grasp the tick close to the skin and pull it straight out.
- Don't squeeze, twist, burn or squash the tick, or allow any blood to remain on your skin.
- Don't apply Vaseline or any other substance.
- Save the tick for testing in a small bottle or plastic bag with a green leaf or damp tissue.
- Label the container with your name, address, phone number and location where you think you picked up the tick.
- Disinfect the bite area and wash your hands.
- Consult your physician about the need for preventive treatment.



## Where should I get tested?

If you have an EM rash, don't wait for test results. Prompt treatment is important—no testing is necessary. During the first few weeks of infection, tests are usually negative. Most labs use insensitive test kits that miss nearly half the positive cases. Ask your doctor to order a Western blot blood test, which gives more information than an ELISA. The following diagnostic labs are approved by CLIA and Medicare and will report all bands on the Western blot, not just CDC-reportable bands:

1. IGeneX, 800-832-3200, [igenex.com](http://igenex.com)
2. MDL, 877-269-0090, [mdlab.com](http://mdlab.com)
3. Stony Brook Lab, 631-444-3824

**Tick testing:** <https://www.lymedisease.org/lyme-basics/ticks/tick-removal/>

## How can I avoid catching Lyme?

- Avoid tick-infested areas
- Wear tick repellent on exposed skin
- Spray your clothing and your shoes with permethrin
- Check yourself, your family and your pets for ticks frequently

**For more tips go to:** <https://www.lymedisease.org/basics>